

Demand better, Build better, Live better.

CLIENT: S.D. JESSUP CONSTRUCTION

15 years of building high performance homes; zero energy ready homes and 5 time winner of the US Dept. of Energy's Housing Innovation Award.

PROBLEM

Building code and better home building practice require homes to be built more air-tight to conserve energy, and provide higher levels of comfort, however, the unintended consequence can be unhealthy indoor air quality. Building science points to four elements that must be addressed to deliver healthier breathable air in today's homes; 1) source control of pollutants that result from building materials, home furnishings, and normal occupant activities in the home; 2) effective air filtration to remove particulates; 3) adequate ventilation to remove pollutants we can't filter; and 4) humidity control for comfort and reduced risk of microbial growth.

Ventilation and humidity can be managed by many different system configurations and controlled through many options which can vary from home to home. These systems are often set to run based on a variety of standards which can be questionable in their actual effectiveness and efficiency based on a particular home at any given time. The problem was simple, no matter how good our systems operated, we could not easily confirm their effectiveness or efficiency, and if we could it required constantly checking multiple devices, apps, or data points. That level of complexity made it nearly impossible to monitor consistently and be confident in the results for our clients.



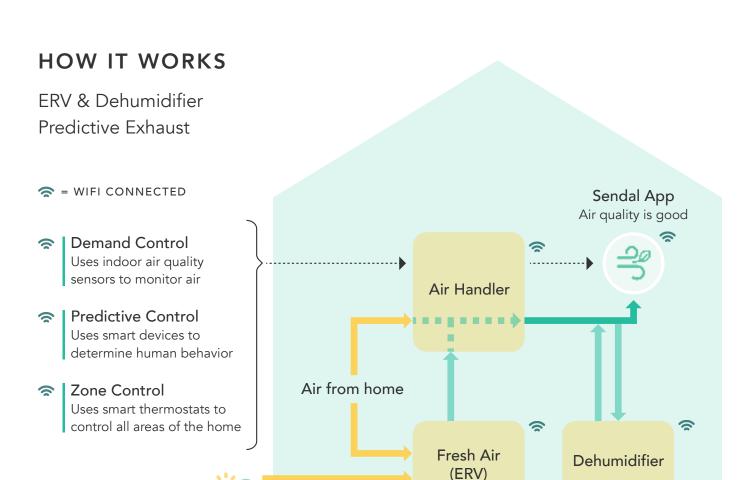
sendal | case study



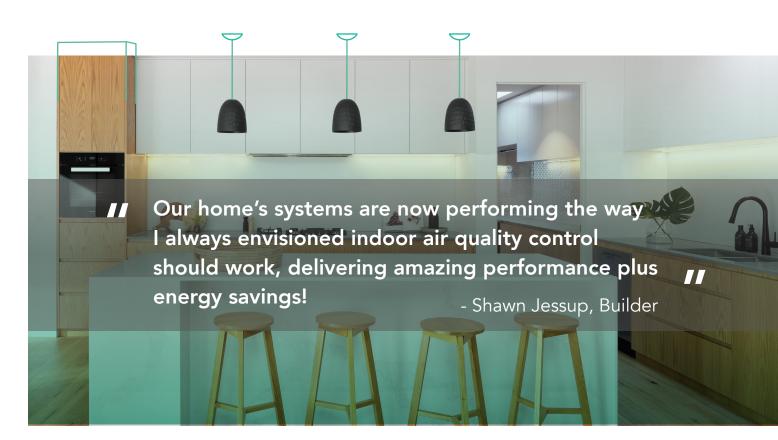
SOLUTION

Sendal's Breathe service goes beyond the broad based standards by being both predictive and responsive to the actual needs of the individual home and client. Breathe reacts to negative indoor air quality events by monitoring the actual current indoor air and engaging the ventilation, filtration, and humidity control systems at the appropriate times and runs the systems until the problems are resolved. The entire process is autonomously control by one service, making the process very user friendly and instills confidence that the systems are responding and doing their jobs as effectively and efficiently as possible by providing feedback and notifications.

Breathe Service Patent Pending



Outside Air



HOW SENDAL WORKS

